

PROCEEDINGS
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CALIFORNIA ACADEMY OF SCIENCES
FOURTH SERIES

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XXIII
REPORT OF THE PRESIDENT OF THE ACADEMY
FOR THE YEAR 1927

BY
C. E. GRUNSKY
President of the Academy

During the year 1927 the Academy has done further useful work, as will appear from the following brief summary of activities, and from the reports of the Director of the Museum and of the Curators of the Academy's various departments. The only disappointment lies in the fact that another year has rolled by without means being in sight for additions to the Academy building in Golden Gate Park. More space is urgently needed. In the fields for scientific investigation and extension of the collections of material to be studied in the Academy's research laboratories, there is no limit except as imposed by inadequate financial resources. So, too, in the matter of keeping exhibits on display which are attractive in appearance and which have educational value, the Academy has done all that its financial resources supplemented by the generosity of an occasional public-spirited citizen would permit.

May 22, 1928



The present membership is made up of:

Patrons.....	19
Honorary members.....	19
Life members.....	83
Fellows.....	32
Members.....	948
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Total.....	1101

On January 1, 1927, the number of members stood at.....	1076
New members added during the year.....	112
Members lost by death.....	26
Members resigned.....	33
Members dropped for non-payment of dues... ..	28
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	87
Net gain during the year.....	25
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Leaving the membership on January 1, 1928, at.....	1101

The Academy carries on its list of patrons the following names:

Living

Mr. George C. Beckley	Mrs. Albert Koebele
Dr. Frank E. Blaisdell, Sr.	Mr. A. Kingsley Macomber
Mr. William B. Bourn	Mr. John W. Mailliard
Mr. William H. Crocker	Mr. Joseph Mailliard
Mr. Peter F. Dunne	Mr. M. Hall McAllister
Dr. Barton Warren Evermann	Mr. Ogden Mills
Mr. Herbert Fleishhacker	Mr. William C. Van Antwerp
Mr. W. M. Giffard	Mr. Edward P. Van Duzee
Mr. Joseph D. Grant	Dr. E. C. Van Dyke
Mr. Edward Hohfeld	

Deceased

Mr. William Alvord	Mr. James Lick
Mr. Charles Crocker	Mr. Alexander F. Morrison
Mr. John W. Hendrie	Mr. Amariah Pierce
Mr. Henry M. Holbrook	Mr. Ignatz Steinhart
Mrs. Charlotte Hosmer	Dr. John Van Denburgh

Those who were called by death during 1927 are as follows:

Mr. Richard Altschul	Member	November, 1927
Mr. Edward F. Bent	Member	November 26, 1927
Mr. Howard Brickell	Member	January 16, 1927
Mr. W. I. Brobeck	Member	July 27, 1927
Mr. Edmund C. Burr	Member	September 2, 1927
Mr. Wigginton E. Creed	Member	August 6, 1927
Dr. William H. Dall	Life member	March 27, 1927
Prof. Edwin Theodore Dumble	Member	January 26, 1927
Dr. Carl H. Eigenmann	Honorary member	May 25, 1927
Mr. William F. Herrin	Life member	February 28, 1927
Mr. Henry E. Huntington	Member	May 23, 1927
Mr. Alfred W. Manning	Life member	September 30, 1927
Dr. C. C. Nutting	Honorary member	January 23, 1927
Mr. James R. Pringle	Member	September 1, 1927
Mr. Ferdinand Reis, Jr.	Member	July 22, 1927
Mr. Albert M. Rosenbaum	Member	November 3, 1927
Prof. Charles Sprague Sargent	Honorary member	March 22, 1927
Prof. George O. Sars	Honorary member	April 10, 1927
Mr. Henry T. Scott	Life member	June 27, 1927
Mr. John R. Scupham	Life member	May 30, 1927
Mr. Henry Hamilton Sherwood	Member	December 9, 1927
Mr. H. A. Snow	Member	July 28, 1927
Mr. Jacob Stern	Member	July 28, 1927
Mr. Chas. B. Turrill	Member	May 11, 1927
Dr. Chas. D. Walcott	Honorary member	February 9, 1927
Mr. Mountford S. Wilson	Member	April 21, 1927

In the year 1927 eleven free lectures were delivered at the stated meetings of the Academy as follows:

- JANUARY 5. The Probable Source of Oil in Colombia and Venezuela, by Mr. F. M. Anderson, Honorary Curator, Department of Paleontology, California Academy of Sciences, San Francisco.
- MARCH 2. Educational Activities in the National Parks, by Mr. Ansel F. Hall, Chief Naturalist in Charge of the Educational Division, National Park Service.
- APRIL 6. A Tour of American Museums, illustrated, by Mr. Frank Tose, Chief Taxidermist, California Academy of Sciences, San Francisco.
- MAY 4. The Pearl Button Industry, illustrated, by Mr. H. Walton Clark, Assistant Curator, Department of Fishes, California Academy of Sciences, San Francisco.

- JUNE 1. More about Pearls and Pearl Buttons, illustrated, by Mr. H. Walton Clark, Assistant Curator, Department of Fishes, California Academy of Sciences.
- JULY 6. Conservation and the Enforcement of Conservation Laws, by Mr. Joseph S. Hunter, Chief of Patrol, California State Fish and Game Commission.
- AUGUST 3. Something about the Sunflower Family, illustrated, by Dr. Sidney F. Blake, Associate Botanist, Department of Agriculture, Washington, D. C.
- SEPTEMBER 7. . . . General Impressions abroad with special reference to Aquariums and Museums, illustrated, by Dr. C. E. Grunsky, President, California Academy of Sciences.
- OCTOBER 5. Early Reminiscences of the California Academy of Sciences, illustrated, by Col. George C. Edwards, First Vice-President, California Academy of Sciences.
- NOVEMBER 2. . . . Observation on the Autumn Birds of the Santa Rita Mountains, Arizona, illustrated, by Miss M. E. McLellan, Assistant Curator, Department of Ornithology and Mammalogy, California Academy of Sciences.
- DECEMBER 7. . . . A Problem in Animal Distribution in Southern Arizona, illustrated, by Mr. Harry S. Swarth, Curator, Department of Ornithology and Mammalogy, California Academy of Sciences.

The Sunday lectures at the Museum of the Academy in Golden Gate Park retain their popularity, and the kindness and good-will of those who contribute of their knowledge and experience on these occasions is sincerely appreciated. The following were delivered during the year 1927 :

- JANUARY 9. The Common Cold, by Dr. W. F. Cheney, Clinical Professor of Medicine, Stanford School of Medicine, San Francisco.
- JANUARY 16. . . . Pain in the Back, its Nature and Causes, illustrated, by Dr. Arthur L. Fisher, Associate Clinical Professor of Orthopedic Surgery, Stanford School of Medicine, San Francisco.
- JANUARY 23. . . . What do we know about Cancer, by Dr. Ludwig A. Enge, Associate Clinical Professor Gynecology, Stanford School of Medicine, San Francisco.

- JANUARY 30 . . . Chinese Medicine, by Dr. Emmet Rixford, Professor of Surgery, Stanford School of Medicine, San Francisco.
- FEBRUARY 6 . . . The Recent International Congress on Tuberculosis, by Dr. Robert A. Peers, Medical Director, Colfax School for the Tuberculous, Colfax, California.
- FEBRUARY 13 . . The Prevention of Food Poisoning, illustrated, by Dr. Karl F. Meyer, Professor of Bacteriology and Director of The Hooper Foundation for Medical Research, University of California.
- FEBRUARY 20 . . Psychoanalysis, False and Genuine, by Dr. E. W. Twitchell, Assistant Clinical Professor of Neurology, University of California, and Director of the Psychopathic Ward, San Francisco Hospital.
- FEBRUARY 27 . . Chasing Phantoms, by Dr. J. M. Wolfsohn, Associate Professor of Mental and Nervous Diseases, Stanford School of Medicine, San Francisco.
- MARCH 6 Goitre, illustrated, by Dr. Wallace I. Terry, Professor of Surgery, University of California.
- MARCH 13 The Ductless Glands, illustrated, by Dr. H. Lisser, Chief Ductless Glands Clinic, University Hospital, and Assistant Clinical Professor of Medicine, University of California.
- MARCH 20 The Causes and Treatment of Anemia, by Dr. Ernest H. Falconer, Associate Clinical Professor of Medicine, University of California.
- MARCH 27 Tropical Diseases in California, by Dr. A. C. Reed, Associate Professor of Medicine, Stanford School of Medicine, San Francisco.
- APRIL 3 The Exploration of the Island of Mindoro, Philippine Islands, illustrated, by Captain A. I. Eagle of the U. S. Air Corps.
- APRIL 10 Field Notes in Alaska, by Mr. George Haley, Professor of Biology, St. Ignatius College, San Francisco.
- APRIL 17 Parasitism in Nature, illustrated, by Dr. C. A. Kofoid, Professor of Zoology, University of California.
- APRIL 24 Practical Benefits of Experimental Biology, by Dr. William Ophüls, Dean of the Medical School and Professor of Pathology, Stanford School of Medicine, San Francisco.
- MAY 1 Modoc Lava-Beds National Monument, illustrated, by Mr. Paul J. Fair, in Charge of Exhibits, United States Forest Service.

- MAY 8. Is it possible to predict California's Rainfall several months in advance, illustrated, by Mr. E. A. Beals, Consulting Meteorologist, Alameda, California.
- OCTOBER 2. Popularizing Science through the Public Press, illustrated, by Dr. William Emerson Ritter, President, Science Service, Washington, D. C.
- OCTOBER 9. Golden Gate Park as a Botanical Garden, illustrated, by Miss Alice Eastwood, Curator, Department of Botany, California Academy of Sciences, San Francisco.
- OCTOBER 16. Home Life of the Alaska Willow Ptarmigan, illustrated, by Mr. Joseph Dixon, Economic Mammalogist, Museum of Vertebrate Zoology, University of California, Berkeley.
- OCTOBER 23. California's Forest Resources, illustrated, by Mr. J. W. Nelson, Assistant District Forester, United States Forest Service, San Francisco.
- OCTOBER 30. California's Opportunity, illustrated, by Captain Clark G. Sauers, in charge of State Parks, Indiana Conservation Commission, Indianapolis, Ind.
- NOVEMBER 6. The Grand Canyon of the Colorado, illustrated, by Mr. Harold Stein, Educational Director of the Boy Scouts, San Francisco.
- NOVEMBER 13. Delphiniums, by Major Newell Vanderbilt, San Rafael.
- NOVEMBER 20. Plant Breeding, illustrated, by Mr. G. P. Rixford, Librarian, California Academy of Sciences, San Francisco.
- NOVEMBER 27. Some Traces of Early Man, by Dr. John Sterling Kingsley, Emeritus Professor of Zoology, University of Illinois.
- DECEMBER 4. The California Academy of Sciences: Its Organization, History, Purposes, and Accomplishments, by Dr. Barton Warren Evermann, Director of the Museum and of the Aquarium of the California Academy of Sciences.
- DECEMBER 11. Organization and Purposes of the Department of Botany, by Miss Alice Eastwood, Curator, Department of Botany, California Academy of Sciences.
- DECEMBER 18. Organization and Purposes of the Department of Paleontology, by Dr. G. Dallas Hanna, Curator, Department of Paleontology, California Academy of Sciences.

LIST OF ACADEMY PUBLICATIONS IN 1927

The scientific activities of the Academy are reflected in large part in its publications. These have been as follows in 1927:

OCCASIONAL PAPERS, XIII—CRETACEOUS DIATOMS FROM CALIFORNIA, by G. Dallas Hanna; pp. 1-49, plates 1-5. (Issued September 17, 1927.)

PROCEEDINGS, FOURTH SERIES

Vol. XV, No. 17, pp. 501-510—REPORT OF THE PRESIDENT OF THE ACADEMY FOR THE YEAR 1926, by C. E. Grunsky, President of the Academy. (Issued March 31, 1927.)

Vol. XV, No. 18, pp. 511-546—REPORT OF THE DIRECTOR OF THE MUSEUM FOR THE YEAR 1926, by Barton Warren Evermann, Director of the MUSEUM. (Issued March 31, 1927.)

Vol. XVI, No. 1, pp. 1-51, 3 text figures—NOTES ON BIRDS OF SINALOA AND NAYARIT, MEXICO, IN THE FALL OF 1925, by M. E. McLellan. (Issued January 31, 1927.)

Vol. XVI, No. 2, pp. 53-85, plate 1, text figures 1-4—A CONTRIBUTION TO THE CLIMATOLOGY OF THE ICE AGE, by C. E. Grunsky. (Issued January 31, 1927.)

Vol. XVI, No. 3, pp. 87-95, plates 2, 3—THE MARINE MIOCENE DEPOSITS OF NORTH COLOMBIA, by Frank M. Anderson. (Issued January 31, 1927.)

Vol. XVI, No. 4, pp. 97-122—FISHES FROM EASTERN CHINA, WITH DESCRIPTIONS OF NEW SPECIES, by Barton Warren Evermann and Tsen-Hwang Shaw. (Issued January 31, 1927.)

Vol. XVI, No. 5, pp. 123-135, plate 4—EXPEDITION OF THE CALIFORNIA ACADEMY OF SCIENCES TO THE GULF OF CALIFORNIA IN 1921. MARINE MOLUSCA OF THE ORDER OPISTHOBANCHIATA, by Fred Baker and G. Dallas Hanna. (Issued April 22, 1927.)

Vol. XVI, No. 6, pp. 137-157, plate 5—EXPEDITION OF THE CALIFORNIA ACADEMY OF SCIENCES TO THE GULF OF CALIFORNIA IN 1921. GEOLOGY AND PALEONTOLOGY, by G. Dallas Hanna and Leo George Hertlein. (Issued April 22, 1927.)

Vol. XVI, No. 7, pp. 159-203, plates 6-12, 3 text figures—EXPEDITION TO GUADALUPE ISLAND, MEXICO, IN 1922. LAND AND FRESHWATER MOLUSKS, by H. A. Pilsbry. (Issued April 22, 1927.)

- Vol. XVI, No. 8, pp. 205-229, plates 13, 14—FORAMINIFERA FROM THE EOCENE NEAR COALINGA, CALIFORNIA, by Joseph A. Cushman and G. Dallas Hanna. (Issued April 22, 1927.)
- Vol. XVI, No. 9, pp. 231-259, plates 15, 16—THE MAKING OF A SCIENTIFIC COLLECTION OF REPTILES AND AMPHIBIANS, by Joseph R. Slevin. (Issued April 22, 1927.)
- Vol. XVI, No. 10, pp. 261-359, 1 text figure—THE BIRDS AND MAMMALS OF MODOC COUNTY, CALIFORNIA, by Joseph Mailliard. (Issued April 27, 1927.)
- Vol. XVI, No. 11, pp. 361-363—NEW SPECIES OF CEANOETHUS, by Alice Eastwood. (Issued April 27, 1927.)
- Vol. XVI, No. 12, pp. 365-380, 4 text figures—RECORDS AND DESCRIPTIONS OF WESTERN BUMBLEBEES (BREMIDÆ), by Theodore H. Frison. (Issued April 27, 1927.)
- Vol. XVI, No. 13, pp. 381-395—EXPEDITION OF THE CALIFORNIA ACADEMY OF SCIENCES TO THE GULF OF CALIFORNIA IN 1921. THE CHRYSOMELIDÆ (COLEOPTERA), by H. C. Fall. (Issued April 27, 1927.)
- Vol. XVI, No. 14, pp. 397-499, text figures 1-287—A STUDY OF THE TERMINAL ABDOMINAL STRUCTURES OF MALE DIPTERA (TWO-WINGED FLIES), by Frank R. Cole. (Issued April 27, 1927.)
- Vol. XVI, No. 15, pp. 501-507—NEW GENERA AND SPECIES OF NORTH AMERICAN FISHES, by David Starr Jordan and Barton Warren Evermann. (Issued April 27, 1927.)
- Vol. XVI, No. 16, pp. 509-515—A GEOLOGIC SECTION IN THE CENTER OF THE SAN JOAQUIN VALLEY, CALIFORNIA, by J. A. Taff and G. D. Hanna. (Issued April 27, 1927.)
- Vol. XVI, No. 17, pp. 517-571, 1 text figure—A REVISION OF THE GENUS ORTHOCARPUS, by David D. Keck. (Issued June 11, 1927.)
- Vol. XVI, No. 18, pp. 573-604—A CONTRIBUTION TO OUR KNOWLEDGE OF THE NORTH AMERICAN CONOPIDÆ (DIPTERA), by M. C. Van Duzee. (Issued June 11, 1927.)
- Vol. XVI, No. 19, pp. 605-647, plates 17-21—PALEONTOLOGY OF THE MIOCENE OF LOWER CALIFORNIA, by Leo George Hertlein and Eric Knight Jordan. (Issued September 2, 1927.)
- Vol. XVI, No. 20, pp. 649-680, plates 22-24—NOTES ON NEW OR RARE FISHES FROM HAWAII, by David Starr Jordan, Barton Warren Evermann and Shigeo Tanaka. (Issued November 14, 1927.)

INTERESTING ITEMS

The financial standing of the Academy appears in the Treasurer's Report. It is not necessary to review the same; but attention may be called to the fact that the indebtedness to the Hibernia Savings and Loan Society is being steadily reduced, about \$10,000 per annum. This loan represents the balance of what was borrowed after the destruction of the Academy building on Market Street in 1906, and now amounts to \$215,000. The income from the Market Street property in 1927 was \$89,000. The interest charges on borrowed money amounted to \$12,042. Except for an investment of \$1,650 in the purchase of American Trust Company stock, the net income of the Academy has been expended in the care and maintenance of its property and in furthering research work and expansion of its collection of natural history material.

It is with much gratification that I note valuable legal services rendered the past year by Mr. Edward Hohfeld, who in the same generous spirit as his predecessor, the late Mr. Alexander F. Morrison, volunteered his services. During the year his name has been added to the list of patrons of the Academy.

Important changes in the personnel of the Academy were the resignation of Mr. W. W. Sargeant, Secretary to the Board of Trustees, July 1, and the appointment to the position of Susie M. Peers, who for 12 years had been the efficient Secretary to the Director. Mr. Sargeant had been the faithful and very efficient secretary of the Board of Trustees since June 5, 1913. His resignation is a real loss to the Academy. Every member of the Board of Trustees, the Council and the Museum and Aquarium staffs will miss him greatly.

Besides lesser expeditions made by Curators and their assistants, opportunity was afforded to Mr. Joseph R. Slevin, Assistant Curator, Department of Herpetology, and our Chief of Exhibits, Mr. Frank Tose, to visit the Galapagos Islands as the guests of Captain G. Allan Hancock, late in the year. They secured material and made studies essential for future installations of groups of turtles and iguanas, for which, however, no space is yet in sight.

The large number of visitors to the Academy's museum, and to the Steinhart Aquarium give ample proof of the appreciation by the public of the Academy's effort to satisfy the universal demand for information on natural history subjects. Much more could be done if the available funds were more ample. Portable exhibits for school use, and lecturers in constant attendance at the museum may be suggested in this connection as features that could be added, but the need for these is overshadowed by the much greater need for additions to the Academy buildings.

Some day, it is hoped, not too far in the future, some generous friend of the natural sciences will provide the endowment that will make adequate additions possible, and some day perhaps a successful appeal may be made to the City of San Francisco to provide the funds for an expansion of the Steinhart Aquarium. Fine though this aquarium is, it does not yet fully meet the aspiration of the Academy, to maintain at San Francisco an establishment in which the wealth of the aquatic life in stream and ocean from all parts of the Pacific and its shores can be adequately displayed.

With sincere appreciation on the part of the officers of the Academy, for the loyal efforts of all who have contributed to its activities and have aided in its work, and counting on like further support, the Academy enters upon another year of service.